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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,042	05/24/2000	Hyun-kwon Chung	1293.1069D/MDS	5358
21171	7590	10/07/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			NGUYEN, HUY THANH	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,042

Applicant(s)

CHUNG ET AL.

Examiner

HUY T NGUYEN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 142 and 149-174 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 142, 149-158, 163, 165, 167, 169 and 174 is/are rejected.
- 7) ☒ Claim(s) 159-162, 164, 166 and 170-173 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 155-158 are rejected under 35 U.S.C. 102 (e) as being anticipated by Mine (5,966,358).

Regarding claim 155, Mine discloses recording and/or reproducing method (column 8, lines 25-35) comprising recording and/or reproducing real time files (movie files) requiring real time recording and/or reproduction on a recording medium according to real time recording and/or reproduction information (movie information) for ensuring real time reproduction, wherein the real time recording and/or reproduction information includes a size of minimum contiguous storage blocks (sectors and units that having a predetermined size for DVD) (column 3, lines 25-30, column 4, lines 45-56).

Regarding claim 156, Mine further teaches that the size of the minimum contiguous bocks corresponds to a size which ensures real time recording and /or reproduction since Mine teaches that the contiguous blocks of the file are real time reproduction .

Regarding claims 157, Mine further teaches that the file having a size more than the size of contiguous blocks since the file comprising more than contiguous blocks since the file has a plurality of contiguous blocks.

Regarding claim 158, Mine further teaches that the size at which contiguous blocks can not reproduced since the contiguous blocks are continuously reproduced in real time and the blocks are synchronizing in timing to each other.

Applicant argues Mine "does not suggest that the recorded information includes any specific information that ensures real time reproduction". In response, the examiner disagrees. It is noted that Mine teaches the movie files are real time recording and/or reproduction therefore the real-time recording and/or reproduction information are the information of the files (content information management information) for ensuring a real time recording and/or reproduction. The claimed recording and/or reproduction information considered as information of the files. Mine further teaches that the information of the files are formatted to be real time recording and/or reproduction as DVD format and the information include includes a minimum size of contiguous block since the DVD format required the information recorded and reproduced as sector or pack or block that has a minimum size.

Applicant argues that "By way of review, Mine discloses a method of recording data sequentially using a type of error processing (slipping processing) which does not require certification pre-processing. Specifically, as noted in col. 2, lines 45-57; certification pre-processing was performed and was a process that could take an hour. Mine asserts that the slipping method set forth in Mine does not require such

certification, which therefore does not interfere with recording moving pictures so as to allow recording on a real time basis since the certification pre-processing (i.e., the process which takes an hour prior to recording) is not performed. (Col. 3, lines 20-25 and 58-63, col. 7, lines 1-7, col. 8, lines 25-35). However, Mine does not suggest that the recorded information includes any specific information that ensures real time reproduction. In response, it is noted that applicant argument does not reflect the claim since claim does not recite any processing the information and the file to be real-time recorded or to reproduced. Instead, Mine discloses recording using a Universal Disk Format (UDF) file system. In order to perform recording, Mine teaches that, as data is being recorded, it is determined in operation S5 whether a defective sector is found. The data affected by the defective sector is recorded in a slipping process in operation S7 by which the affected data is recorded in a next error-free sector. The data recording continues at the next address and the defective sector is stored in a random access memory 24. At the end of the recording in operation S8, defect lists, which are based on the defects stored in the random access memory 24, are written to the disk, and the management information for the UDF system is updated in operation S10. (Col. 7, lines 34-38, 51-62, col. 8, lines 1-23; FIG. 3).

Applicants argues that "As such, Mine teaches a process which allows recording without certification, but does not disclose the recorded information relies on information which ensures real time recording or reproduction, or whether the recorded information includes sizes of blocks being recorded "In response, the examiner disagrees. It is noted that any information of the files discloses by Mine are information for ensuring

Art Unit: 2616

real time recording or reproduction since the files are real time recording and/or reproduction. Further the information include a minimum size since the information of files are formed by objects, blocks or sectors or packets according to DVD format.

3. Claim 155 is rejected under 35 U.S.C. 102 as being anticipated by Yasui (5,999,505).

Regarding claim 155, Yasui discloses recording and/or reproducing method (column 8, lines 5-30) comprising recording and/or reproducing real time files (movie files) requiring real time recording and/or reproduction on a recording medium according to real time recording and/or reproduction information (file content information) for ensuring real time reproduction, wherein the real time recording and/or reproduction information includes a size of minimum contiguous storage blocks (sector, Fig. 5)

Applicant argues that Yasui does not teach information for ensuring real time recording/ reproduction. In response, the examiner disagrees it is noted that Yasui teaches that the file is a real time recording and/or reproduction file requiring real time recording and/or reproduction, therefore the recording and/or reproduction information of the files are information for ensuring recording and/or reproduction. Further the information of the file are formed by sectors or blocks therefore the sector or blocks having minimum size for ensuring real time recording and/or reproduction.

4. Claim 155 is rejected under 35 U.S.C. 102 (e) as being anticipated by Gotoh (6,292,625).

Regarding claim 155, Gotoh discloses recording and/or reproducing method (column 8, lines 25-35 comprising recording and/or reproducing real time files (movie files) requiring real time recording and/or reproduction on a recording medium according to real time recording and/or reproduction information (movie information) for ensuring real time reproduction (column 10, line 10-40); wherein the real time recording and/or reproduction information includes a size of minimum contiguous storage blocks (sector and ECC block)(Fig. 7).

Regarding claim 156, Gotoh further teaches the size of the minimum contiguous blocks corresponds to a size which ensures real time reproduction since the file is a real time reproduction file .

Regarding claim 157, Gotoh further teaches that the file as a length longer than a contiguous blocks since the file comprising a plurality of contiguous blocks.

Regarding claims 158, Gotoh further teaches that the size of the minimum contiguous blocks corresponds to a size below which real time reproduction can not be performed since the contiguous blocks of the file a real time reproduction and the blocks or sectors of the file are synchronizing to each other in reproduction .

Regarding claims 163 , Goth further reaches the real time file comprising a multiple blocks and the recording and/or reroduction information comprises information for recording groups of the blocks (sectors, packets or blocks) for ensuring the reproduction in real time.

Art Unit: 2616

5. Claims 142, 149-151, 153 and 174 are rejected under 35 U.S.C. 102 (e) as being anticipated by Gotoh (6,292,625).

Regarding claim 142, Gotoh discloses a recording and/or reproducing method comprising: recording and/or reproducing real time files (AV movie files) requiring real time recording and/or reproduction on a recording medium according to real time recording and/or reproduction information for ensuring real time reproduction (column 10, line 10-40, column 12, lines 10-48, column 15, lines 35-45); and recording and/or reproducing the real time recording and/or reproduction information in a file type field in an (ICB) TAG field of a file entry for a universal disk format (UDF) system (Figs. 3 and 22-23, column 7).

Regarding claim 149, Gotoh further teaches reproducing the real time files using the real time recording and/or reproduction information (column 12, lines 18-30).

Regarding claims 150, Gotoh further teaches recording and/or reproducing the recording and/or reproducing information comprises storing the real time recording /reproduction information in corresponding ones of the real time files (Fig. 22 and 23).

Regarding claim 151, Gotoh further teaches the real time recording and/or reproduction information includes file indication information indicating that the real time files require real time recording and/or reproduction (column 9, lines 10-40, column 12, line 4-48, Fig. 1).

Regarding claim 153, Gotoh teaches the recording and/or reproducing the real time files comprises: reading a volume area on the recording medium; and reproducing

a file as one of the real time files in accordance with the real time recording and/or reproduction information (Figs. 3 and 5, column 12, lines 4-48).

Regarding claim 174, Gotoh further teaches the real time file comprising a multiple blocks and the recording and/or reproduction information comprises information for recording groups of the blocks (sectors, packets or blocks) for ensuring the reproduction in real time.

Applicant argues that Gotoh et al. does not disclose information which ensures real time reproduction. In response the examiner disagrees. It is noted that Gotoh teaches that the information of a file are recorded on the medium as a information file being a real time and/or reproduction file that require a real time recording and/or reproduction, therefore the recording and/or reproduction information of the file are the information for ensuring real time recording and/or reproduction.

Applicants argue that "However, since Gotoh et al. assumes that the defective ECC block will be sufficiently close to allow continuous reproduction, Gotoh et al. cannot ensure continuous reproduction based on information recorded in the file management system. Specifically, if multiple ECC blocks contain defects such that the buffered ECC blocks are reproduced before a next nondirective ECC is searched for and determined, the AV file will be interrupted and therefore not be reproduced in real time since the track buffer does not contain sufficient ECC blocks to allow continuous reproduction. Moreover, the use of the allocation descriptor shown in C6 in FIG. 3 does not ensure real time reproduction since the descriptor merely discloses which ECC blocks are not

Art Unit: 2616

readable without guaranteeing that the next usable ECC block can be accessed and read before the track buffer runs out or otherwise ensuring that the AV file can be reproduced in real time. Lastly, while the allocation descriptor merely describes which ECC blocks are a defective extent, the allocation descriptor does not record a minimum number of ECC blocks which are contiguous. As such, while Gotoh et al. relies on a proximity between non-defective ECC blocks for real time reproduction, Gotoh et al. does not disclose information which ensures real time reproduction." In response, it is noted that applicant argument does not reflect the claims since the claims do not clearly recite any the processing of the information of the file when recording or reproduction that requiring a real time recording and/or reproduction. Further it is noted that the recording and/or reproduction information of a file as disclosed by Gotoh include a minimum size of contiguous blocks since the information are formed by sector, packets and blocks.

Applicants argue that Gotoh does not suggest the ICB TAG identifies that the information ensure real time reproduction. In response the examiner disagrees. It is noted that Gotoh teach ICB TAG having information to ensure real time reproduction since the file is a real time reproduction file and the file having the ICB TAG information.

Applicants argue that the ICB TAG known at the time of Gotoh et al did not include an attribute that allowed an indication that the AV was to be recorded or reproduced in real time. In response, the examiner disagrees. It is noted that Gotoh teaches the file to be recorded and reproduced in real time and the ICB TAG are information of the file, therefore the ICB TAG are information for ensuring a real time

Art Unit: 2616

reproduction of the file. Further, it is noted that the applicants' argument does not reflect the claims since nowhere in claim 142 does it recite that ICB TAG that include an attribute that allowed an indication that an AV was to be recorded or reproduced in real time.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 142, 149-151 and 153, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mine in view of Yasui and OSTA (Universal Disk Format Specification).

Regarding claim 142, Mine discloses a recording and/or reproducing method comprising: recording and/or reproducing real time files requiring real time recording and/or reproduction on a recording medium according to real time recording and/or reproduction information for ensuring real time reproduction (column 10, line 10-40); and recording and/or reproducing the real time recording and/or reproduction information in a file entry for a universal disk format (UDF) system (column 7, lines 20-30, column 8, lines 15-25) .

Mine fails to teach generating and storing file reproduction information. Yasui teaches a recording and reproducing apparatus having a control means for generating reproduction information (name file) recorded on a file used to ensure the real time reproduction of the real time file (Figs. 1,7, column 8, lines 5-15).

It would have been obvious to one of ordinary skill in the art to modify Mine with Yasui by using a control means as taught by Yasui with Mine apparatus for generating the reproduction information as file names in file for recorded real time files thereby enhancing the function and capability of the apparatus of Mine for easily access the real time file to be reproduced.

Mine as modified with Yasui further teaches the reproduction information is stored as file entry and comprises a tag but fails to specifically teach that the tag is an ICB tag field. However, it is noted that using ICB tag field indicating a file used with

UDF is known that and as taught by GOSTA (See UNIVERSAL DISC FORMAT SPECIFICATION, section 2.3.5). Therefore, it would have been obvious to one of ordinary skill in the art to modify Mine as modified with Yasui above with GOSTA by using ICB tag field as an entry for file names of Mine as modified with Yasui.

Regarding claim 149, mine as modified with Yasui further teaches reproducing the real time files using the real time recording and/or reproduction information (See Yasui reference).

Regarding claims 150, Mine as modified with Yasui further teaches recording and/or reproducing the recording and/or reproducing information comprises storing the real time recording /reproduction information in corresponding ones of the real time files (See Yasui Fig. 7).

Regarding claim 151, mine as modified with Yasui further teaches the real time recording and/or reproduction information includes file indication information indicating that the real time files require real time recording and/or reproduction (Yasui Fig. 7).

Regarding claim 153, Mine as modified with Yasui further teaches the recording and/or reproducing the real time files comprises: reading a volume area on the recording medium; and reproducing a file as one of the real time files in accordance with the real time recording and/or reproduction information (See Mine and Yasui references).

Applicant's argue that there is no suggest to combine mine or Yasui with OSTA since Yasui or mine does not suggest storing the information in ICB TAG. In response, it is noted that using ICB TAG is well known in the art to store the information of the file

and Mine and Yasui teach that the files are real time reproduction therefore, it is obvious to one of ordinary skill in the art to store the information of the file as taught by Mine or Yasui in ICB TAG as information for ensuring real time reproduction.

8. Claims 152, 154, 165 and 167 are rejected under 35 U.S.C. 103(a) as being unpatentable Gotoh in view of Nakamura (5,745,645).

Regarding claim 152, Gotoh fails to the real time recording/reproduction information includes at least one of: recording/reproduction bit rate information, Information on minimum contiguous storage clocks satisfying a condition in which a playback time of a current data block is greater than a sum of a seek time and a read time of a data block to be played back next, and information on a play back time for ensuring minimum contiguous storage.

Nakamura teaches a recording apparatus for recording video on a medium including a bite rate information for video block of a file that uses for continuously reproducing of the video data (column 40, lines 60-65).

It would have been obvious to one of ordinary skill in the art to modify Gotoh with Nakamura by providing the bit rate information as the reproduction information for enable the real time file is continuously reproduced.

Regarding claim 154, Gotoh as modified with Nakamura further teach the reproducing of the file comprises analyzing defect management information, file allocation information (see Gotoh), recording/reproduction bit rate information, and file

buffering information according to the real time recording and/or reproduction information (See Nakamura, column 60-65).

Regarding claim 165, Gotoh as modified with Nakamura further teaches the information is bit rate (See Nakamura reference column 40, lines 60-65).

Regarding claim 167, Gotoh the real time information is the information on play back time (reproduction time) for ensuring minimum contiguous storage since Gotoh teaches that the information are stored as blocks or sectors used for real time in reproducing time.

Allowable Subject Matter

9. Claims 159-162, 164, 166, 168 and 170-173 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (703) 305-4775. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, acting, Thai Tran can be reached on (703) 305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

~~HUY NGUYEN~~
PRIMARY EXAMINER

H.N